

The smelting of.....

S/133/62/000/005/004/008
A054/A127

pouring is limited by the shortness of the secondary cooling sector (6.5m), where the metal solidifies. The rimming of the steel in the mold, in case of medium-carbon grades, can be promoted by adding aluminum, in the case of medium-carbon grades by blowing oxygen into the metal stream after the intermittent ladle. The macrostructure of continuously poured, electro-smelted steels was studied with 110 templates taken from 67 heats. Due to the low iron content and inadequate addition of aluminum in the ladle, the metal with a carbon content above 0.13% rims weakly in the mold and much too thin a skin forms. In this case, blowing oxygen will intensify rimming and a normal skin, 10 - 25 mm thick, will be obtained. Other defects often encountered in this kind of ingots are blisters in the skin, 0.5 - 3.0 mm in diameter, at a depth of 1 - 5 mm below the surface, and also beads and lateral and longitudinal cracks. Lateral cracks can be prevented by closely controlling the metal oxidation and improving the mold-coating. Longitudinal cracks are less frequent, mainly owing to the delayed shrinkage of the thinned sectors of the solidifying skin in the mold. Rimming steel ingots are hot-rolled on the 1200-mm mill, with universal roughing, two-high stand and reversing-finishing four-high stand, with coils heated in the furnace. To promote the sintering of gas-blisters, the reductions are increased (170 x 1040 mm slabs are reduced with 9 passes instead of 11, 150 x 620 mm slabs with 5 passes instead of 7).
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The slab-heating temperature was raised from 1260 - 1270 to 1280 - 1310°C. Sheets, 13 - 14 mm and 2 - 3 mm thick are rolled from these slabs. At the "Zaporozhstal" Plant the rate of consumption of the metal charge was 1.262 ton/ton of flawless product in 1960; for the new process this parameter was 1.127 - 1.135 ton/ton of flawless product. Smelting time was reduced to 4 1/2 hours; the electric power required is 500 - 550 kW-h/ton of flawless steel. The application of minimum 80-ton capacity electric furnaces and continuous pouring is advisable where cheap open-hearth scrap and electric power are available. This increases production by 8 - 12% with a minimum capital outlay. There are 3 figures. The reference to the English-language publication reads as follows: Reinartz, L., Barnes, H., Iron and Steel Engineer, no. 1, 1954.

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S/148/63/000/001/004/019
E071/E151

AUTHORS: Gankin, V.B., and Oyks, G.N.

TITLE: The mechanism of crystallisation of rimming steel during continuous casting

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, no.1, 1963, 34-41

TEXT: The crystallisation front in a continuously cast ingot was investigated. The position of the front in continuous casting was determined by three methods: 1) by emptying the remaining liquid from the ingot (the structure of the steel skin was studied after a break out in the region of the secondary cooling); 2) by introduction of radioactive phosphorus during casting and subsequent radiography of the ingot cross-section; 3) by introduction of sulphur during casting with subsequent sulphur prints of longitudinal and transverse section. It was confirmed by all the above methods that the formation of gas bubbles (subsequent blow-holes) takes place at the solid-liquid interface. The bubbles open towards the liquid centre of the ingot. In the transverse section of the skin the bubbles increase in volume as solidification.

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progresses. An increase in the teeming velocity (for steel containing 0.14-0.22% C) leads to a decrease in the length and diameter of the bubbles and the width of the bubble zone. From literature data and the results obtained, the probable mechanism of the formation of continuously cast rimming steel ingots (of different carbon contents) was postulated. In the region of the crystalliser there are two distinct cooling zones - an upper (from 50 to 300 mm) with a high rate of heat removal ($1.2-1.6 \times 10^6$ kcal per m^2 hr) and a lower where, due to the greater thickness of the skin and greater clearance between the skin and mould walls, the rate of heat removal is lower ($0.2-0.4 \times 10^6$ kcal/ m^2 hr). In the upper zone the rate of crystallisation is high, the thickness of the skin is non-uniform (due to differences in the contact between the skin and mould walls and the scouring action of the falling stream). Occasionally, when the velocity of crystallisation exceeds the rate of bubble growth, some bubbles are trapped in the skin. With increasing amounts of solid, the crystallisation velocity decreases, and the ascending currents of gas and metal flush out the bubbles and the metal enriched in segregates from

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the internal surface of the skin, so promoting the formation of a dense skin. In ingots containing 0.14-0.22% C the formation of bubbles begins in the lower part of the crystalliser, while in ingots containing 0.06-0.10% C this takes place later in the region of secondary cooling. The formation of the bubble zone is influenced by the ferrostatic pressure of the liquid steel, so that in steel containing 0.14-0.22% C bubble growth stops earlier and the bubbles are short, while in low carbon steel the bubble length depends mainly on the degree of oxidation. The influence of the degree of oxidation on the shape of the bubble zone and the density of the central zone is briefly discussed. There are 6 figures.

ASSOCIATION: TsNIChM i Moskovskiy institut stali i splavov
(TsNIChM and the Moscow Institute of Steel and Alloys)

SUBMITTED: October 6, 1962

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GANKIN, V.B.; SLIVCHANSKAYA, V.V.; ITSKOVICH, G.M.; OYKS, G.N.

Primary structure of a continuous ingot of rimmed steel. Izv.
vys. ucheb. zav.; chern. met. 6 no.9:62-67 '63. (MIRA 16:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metal-
lurgii i Moskovskiy institut stali i splavov.

RUDKOVSKIY, D.M.; GANKIN, V.Yu.; IMYANITOV, N.S.

Recovery of $C_6 - C_8$ aldehydes from oxo synthesis products. Trudy
VNIINeftekhim no.2:90-92 '60. (MIA 14:2)
(Aldehydes) (Oxo process)

RUDKOVSKIY, D.M.; IMYANITOV, N.S.; GANKIN, V.Yu.

Conversions of hexafluoropropylene under conditions of oxo synthesis.
Trudy VIII Neftekhim no.2:121-124 '60. (MIRA 14:2)

(Propene)

(Oxo process)

(Fluorine organic compounds)

L 34001-65 EWT(m)/EPF(c)/ENP(j) P-4/Pr-4 RM
 ACCESSION NR: AP5006077 S/0204/65/005/001/0058/0061

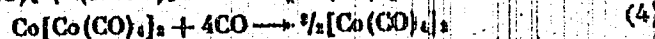
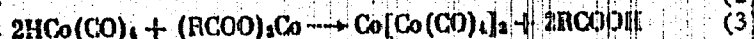
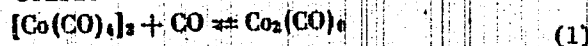
AUTHOR: Gankin, V. Yu.; Rozovskiy, A. Ya; Rudkovskiy, D. M.

TITLE: The mechanism of formation of a catalyst for the hydroformylation reaction from cobalt salts

SOURCE: Neftekhimiya, v. 5, no. 1, 1965, 58-61

TOPIC TAGS: hydroformylation, cobalt carbonyl, hydroformylation catalyst, cobalt naphthene, carbon monoxide

ABSTRACT: A mechanism is proposed for the formation of cobalt carbonyl catalysts from Co salts during the oxo-reaction (hydroformylation of olefins). Kinetic analysis and experimental studies confirmed that the mechanism involves the reactions:



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ACCESSION NR: AP5006077

Thus, formation of cobalt carbonyl from cobalt naphthene was determined in toluene solution after addition of a small amount of carbonyl at an initial total carbon monoxide+hydrogen pressure of 400 atm.; this was accomplished by heating the mixture to 95C for 30 min. in an autoclave, analyzing the liquid and gaseous reaction products and measuring the decrease of pressure with time. The equilibrium constant for reaction (1), i.e. the reversible formation of cobalt nonacarbonyl from octacarbonyl and carbon monoxide, and the rate constant for formation of catalytically active hydrocarbonyl (reaction 2) were derived. A linear relationship between P_{H_2}/K and P_{CO} was predicted from the kinetic analysis in agreement with experimental results, K being a reaction constant which can be calculated from experimental values and P_{H_2} and P_{CO} being the partial pressures of hydrogen and carbon monoxide, respectively. Reaction (1) and the formation of cobalt nonacarbonyl explains the inhibitory effect of carbon monoxide on the hydroformylation reaction. Orig. art. has: 3 tables, 2 figures and 9 formulas.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov (All-union petrochemical processes scientific research institute)

SUBMITTED: 24Dec63

ENCL: 00

SUB CODE: 0C

NO REF SOV: 003

OTHER: 003

Card 2/2

GANKIN, V.Yu.; KRINKIN, D.P.; RUDKOVSKIY, D.M.; TRIFEL', A.G.

Effect of the temperature of formation of metallic cobalt on its reaction capacity in the process of carbonyl formation. Khim. i tekhn. topl. i masel 10 no.10:11-14 O '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov.

GANKIN, V.Yu.; KRINKIN, P.P.; RUDEVSKIY, D.M.

Kinetics of transformation of dicobaltoctacarbonyl to cobalt
hydrocarbinol in the liquid phase. Zhur.ob.khim. 35 no.12:2127-
2130 D '65. (MIRA 19:1)

1. Submitted December 17, 1964.

S/218/63/028/001/001/002
B144/B186

AUTHORS: Reznichenko, M. S. (Deceased), Rydalevskiy, Ye. Ye., and Gankina, E. S.

TITLE: Structural changes of gliadin caused by gamma irradiation of wheat grains

PERIODICAL: Biokhimiya, v. 28, no. 1, 1963, 52-56

TEXT: Grains of Erythrospermum 841 wheat containing 10-26% moisture were irradiated in vivo with $10 \cdot 10^6$ and $20 \cdot 10^6$ r. Then gliadin was extracted and the N-terminal radicals were determined. The dinitrophenolated (DNP) amino acids were separated by paper chromatography into: 1) borate buffer (pH 9) - n-butyl alcohol - ethyl alcohol - isoamyl alcohol, ratio 6:4:1:4; 2) isoamyl alcohol saturated with phosphate buffer (pH 6.2); 3) phenol saturated with water. The following N-terminal amino acids were identified: aspartic and glutamic acids, serine (by additional separation into n-butyl alcohol - butyl acetate - 1% NH_4OH , ratio 1:2:3), threonine, lysine, phenyl alanine, and leucine. The quantitative spectrophotometric

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analysis of the DNP derivatives of glutamic and aspartic acids and of serine in 1 and 3 showed a significant reduction in the irradiated samples. The content of N-terminal amino acids decreased linearly with increasing irradiation dose; this is attributed to deamination of their α amino groups. The sedimentation coefficient was determined in a 1% solution of gliadin in 50% aqueous solution of dimethyl formamide. Then the molecular weight was calculated from the formula of V.G. Aldoshin and S.Ya. Frenkel' (Vysokomolekul. soyedineniya 4, 116, 1962). It was 68,400 for nonirradiated gliadin, 72,000 for gliadin containing 10% moisture and irradiated with $10 \cdot 10^6$ r, and 55,000 for gliadin containing 25% moisture and irradiated with $20 \cdot 10^6$ r. In the same order, the intrinsic viscosities were 0.3, 0.336, and 0.195. The degradation of the protein molecules is due to the splitting of peptide bonds by free radicals forming in a moist medium on γ -irradiation. There are 2 figures and 3 tables.

ASSOCIATION: Tekstil'nyy institut im. S.M. Kirova, Leningrad (Textile Institute imeni S.M. Kirov, Leningrad)

SUBMITTED: April 13, 1962

Card 2/2

SOV-21-58-9-15/29

AUTHORS: Abramova, T.M., Gankina, I.L. and Fomenko, A.S.

TITLE: Investigation of Cathode Reduction of Oxygen to Hydrogen Peroxide on a Coal-Nickel Electrode (Issledovaniye katodno-go vosstanovleniya kisloroda do perekisi vodoroda na ugol'no-nikelevom elektrode)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 9, pp 974 - 976 (USSR)

ABSTRACT: The process of cathode reduction of oxygen is used in technical production of hydrogen peroxide. However, the mechanism of the reaction which takes place in this process has not been explained thus far. The authors employed the heavy isotope O^{18} in order to clarify the origin of oxygen in hydrogen peroxide, which forms on a coal-nickel cathode in the oxygen reduction. As a result of this investigation it was shown that only molecular oxygen blown through the electrode plays a part in the cathode formation of hydrogen peroxide, but not the oxygen of water. These findings are in agreement with the concept of A.N. Frumkin that hydrogen peroxide

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SOV-21-56-9-15/26

Investigation of Cathode Reduction of Oxygen to Hydrogen Peroxide on a
Coal-Nickel Electrode

formation is due to "newly"-adsorbed oxygen. There are
2 diagrams, 1 table and 10 references, 7 of which are Sov-
iet, 2 English and 1 American.

ASSOCIATION: Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo
AN UkrSSR (Institute of Physical Chemistry im. L.V. Pissar-
zhevskiy of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, A.I. Brodskiy

SUBMITTED: April 21, 1958

NOTE: Russian title and Russian names of individuals and insti-
tutions appearing in this article have been used in the
transliteration

1. Oxygen--Reduction
2. Hydrogen peroxide--Production
3. Electrolysis

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GANKINA, I. L.

5(4)
 PHASE I BOOK EXPLOITATION SOV/2216

Soveshchaniye po elektrokhemii. 4th, Moscow, 1956.

Trudy... [laborniki] (Transactions of the Fourth Conference on Electrochemistry, Collection of Articles) Moscow: Izdatel'stvo Khimicheskoy Promyshlennosti, 1959. 888 p. Errata slip inserted. 2 500 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.M. Prumkin (Resp. Ed.) Academician, O.A. Yasin, Professor; S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor; S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor; Ya. M. Kolotyrkin, Doctor of Chemical Sciences; V.V. Losev, P.D. Lukovtsev, Professor; Z.A. Solov'yeva; V.V. Stender, Professor; and G.M. Florianovich; Ed. of Publishing House: N.G. Iegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conf. on Electrochemistry sponsored by the Department of Chemical Sciences, USSR. The collection of Physical Chemistry, Academy of Sciences, USSR. The collection of Physical Chemistry, branches of electrochemical kinetics, double layer theory, different galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Krasil'shchikov, A.I. (Gosudarstvennyy institut elektroy promyshlennosti - State Institute of the Nitrogen Industry), Electrochemical Reactions of Oxygen 272

Gorbovich, M.A. (Deceased) and R.I. Kaganovich (Moscow State University), Study of the Mechanism of Some Anode Processes by Combining Electrochemical and Tagged-Atom Methods 277

Shlygin, A.I., and G.A. Bogdanovskiy (Moscow State University), Mechanism of the Electrochemical Oxidation of Some Compounds on Platinum 282

Khomaykov, V.G., N.O. Bakchisaraya's'yan, and A.P. Tomilov (Moskovskiy khimiko-tekhnologicheskii institut imeni D.I. Mendeleeva-Moscow Institute of Chemical Technology imeni D.I. Mendel'eva), Mechanism of the Electrolytic Oxidation of Acetone in Alkaline Solutions 287

Khomutov, N. Ye. (Moscow Institute of Chemical Technology imeni D.I. Mendeleeva), Mechanism of Some Irreversible Elect-

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olytic-Oxidation Reactions 292

Pomeroy, A.S., T.M. Abramova and I.L. Gankina (Institute of Physical Chemistry, Akademiya Nauk SSSR, Moscow), Mechanism of the Corrosion of Iron, Manganese, Zinc and Aluminum With the Aid of Heavy Oxygen Isotopes 299

Discussion (A.M. Ginzberg, A.P. Tomilov, P.D. Lukovtsev, G.A. Todoradze and contributing authors) 302

PART IV. ELECTRODE PROCESSES IN FUSIONS 309

Yasin, O.A. (Ural'skiy politekhnicheskii institut imeni Ural'skiy tekhnicheskii institut), Electrode Processes in Fused Oxides 311

Piontelli, R., G. Sterchi, M. Prandini, and G. Montanelli (Italy), Investigation of Overvoltage Phenomena in Fused Salts 323

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5 (4), 18 (7)

05824

AUTHORS: Fomenko, A. S., Abramova, T. M.,
Gankina, I. L.

SOV/76-33-10-22/45

TITLE: An Investigation of Metal Corrosion With the Help of the Heavy
Oxygen Isotope. II. Moist Atmospheric Corrosion of Cadmium

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 10, pp 2249 - 2252
(USSR)

ABSTRACT: In previous articles (Refs 1,2) the corrosion of iron and magne-
sium was investigated by means of the heavy oxygen isotope, and
it was shown that there was an electrochemical mechanism with
oxygen depolarization. In this article the authors investigated
the moist atmospheric corrosion of cadmium by the same method
and made experiments on the oxygen exchange of the corrosion
products of cadmium ($\text{Cd}(\text{OH})_2$) with H_2O^{18} . The latter indicated
that no exchange took place within 60 hours (Table 1). Since in-
vestigations with the help of cadmium filings of the sort KD-0
failed, experiments were made by means of cadmium plating ap-
plied to a quartz tube (inner side). 3% NaCl solution served as
corrosion liquid which was poured into the tube in a definite
quantity together with oxygen at atmospheric pressure. The

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An Investigation of Metal Corrosion With the Help of ¹⁸O in the resultant water and gaseous oxygen was determined by mass spectrometric analysis (Ref 3). Experiments were made with the aid of natural water in heavy oxygen atmosphere as well as with H₂¹⁸O in a common oxygen atmosphere. Results of measurement (Table 2) concerning the distribution of ¹⁸O among water, gaseous oxygen and corrosion products indicate that cadmium corrodes according to two parallel mechanisms, i.e. an electrochemical mechanism with oxygen depolarization (as has already been observed by Feitknecht, Wyler (Ref 5), Ya. M. Kolotyrkin and L. A. Medvedeva (Ref 6)) and a chemical mechanism. Investigations of copper corrosion have shown that the exchange of Cu(OH)₂ oxygen with water is equilibrated after 48 hours. Accordingly, the afore-mentioned method cannot be applied here. In conclusion, the authors thank Academician A. I. Brodskiy for his help. There are 2 tables and 7 references, 6 of which are Soviet.

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05824

An Investigation of Metal Corrosion With the Help of SOV/76-33-10-22/45
the Heavy Oxygen Isotope. II. Moist Atmospheric Corrosion of Cadmium

ASSOCIATION: Akademiya nauk USSR, Institut fizicheskoy khimii im. L. V.
Pisarzhevskogo, Kiyev (Academy of Sciences of the UkrSSR,
Institute of Physical Chemistry imeni L. V. Pisarzhevskiy,
Kiyev)

SUBMITTED: March 21, 1958

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67265

SOV/20-129-4-29/68

18.8300
5.2600(A)
~~5(4), 5(2)~~

AUTHORS:

Abramova, T. M., Gankina, I. L., Fomenko, A. S.

TITLE:

The Mechanism of Hydrogen Peroxide Formation in the Corrosion of Metals

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 4, pp 820-823 (USSR)

ABSTRACT:

The authors set themselves the task of finding an answer to the following question: Is the hydrogen peroxide which is formed as an intermediate in the corrosion of metals caused by water and air formed from oxygen of the air, from that of water, or from the oxygen of both? As, according to reference 10, H_2O_2 is formed as an intermediate in the cathodic reduction of O , and O is depolarized also in the corrosion of metals in air, the formation of H_2O_2 from the O in air was probable. In that case its isotopic composition would have to correspond to that of gaseous O . This was checked by the authors by means of O^{18} which was either added to the O blown through the solution corroding the metal, or was admixed to the solution as $H_2O^{18}_2$. The

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The Mechanism of Hydrogen Peroxide Formation in the Corrosion of Metals

approach of the isotopic composition of the H_2O_2 formed to that of gaseous O was actually observed by the authors in the corrosion of Zn, Mg, Sn, Al, and Cd in aqueous solution of H_2O_2 and during the blowing through of O . The experiments were made in the dark at room temperature and took 1 - 24 hours. The H_2O_2 content of the solution was then determined by means of permanganate (in the case of Zn and Cd the insoluble peroxides were dissolved by acidification) and the isotopic composition of H_2O_2 was determined by means of a mass spectrometer. Table 1 shows that in the experiments with $H_2O_2^{18} + O_2^{16}$ the O^{18} content decreases in the H_2O_2 analyzed after the experiment is ended, whereas it increases in the experiments made with $H_2O_2^{16} + O_2^{18}$. The H_2O_2 is thus produced from air-oxygen. A rough calculation of the isotopic composition of H_2O_2 to be expected, carried out, as an example, on Zn, showed a difference of 13% if compared

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The Mechanism of Hydrogen Peroxide Formation in the Corrosion of Metals

with the experimental result. Also the differences found in experiments with other metals are of the same order of magnitude. The following causes are assumed to be responsible:

1) Part of the H_2O_2 formed is immediately again catalytically decomposed by the metal. 2) The O liberated in this decomposition partly again enters into reaction accompanied by the formation of H_2O_2 . Attempts at stabilizing the H_2O_2 formed by additions of oxyquinoline, sodium pyrophosphate, sodium silicate etc. were unsuccessful. The authors refer to published data, according to which there is no exchange between the oxygen of H_2O_2 and of air under the prevailing experimental conditions (Refs 14,15), which they were able to confirm by control tests. Thus, as no side-reactions occur, the results obtained by the authors prove that the H_2O_2 is produced in the corrosion of metals from the oxygen in the air. It is finally mentioned that the authors thank A. I. Brodskiy, Academician of the AS UkrSSR, for supervising the investigations, and Engineer I. M. Protas for the mass-spectrometrical analyses

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The Mechanism of Hydrogen Peroxide Formation in the Corrosion of Metals

carried out. There are 1 table and 16 references, 3 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo Akademii nauk USSR (Institute of Physical Chemistry imeni L. V. Pisarzhevskiy of the Academy of Sciences, UkrSSR)

PRESENTED: July 13, 1959, by A. N. Frumkin, Academician

SUBMITTED: July 13, 1959

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33490

S/195/61/002/005/015/027

E111/E485

11.1310

AUTHORS: Fomenko, A.S., Gankina, I.L., Avramova, T.M.

TITLE: Study of the mechanism of the decomposition of hydrogen peroxide on activated charcoal by the isotope method

PERIODICAL: Kinetika i kataliz, v.2, no.5, 1961, 732-736

TEXT: The decomposition of hydrogen peroxide on activated charcoal was studied by many authors but their assumptions on the mechanism of this process are in contradiction. In the present work the mechanism was studied using O^{18} introduced into the charcoal oxides (with H_2O_2 of the natural isotope composition) or into the H_2O_2 (with ordinary oxygen charcoal). The isotope compositions of the charcoal oxides and of gaseous oxygen were determined to evaluate the mechanism. The O^{18} -containing charcoal was prepared by grinding the commercial charcoal type "BAU" (BAU), de-ashing with acid, washing, drying and activating in CO_2 at $800^\circ C$ for 6 hours and $1000^\circ C$ for 3 hours; after this, the material was treated with hydrogen at $1000^\circ C$ (which was then pumped off at 600 to $650^\circ C$), cooled in oxygen-free nitrogen, treated at room temperature with O^{18} -enriched gaseous oxygen and

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stored in heavy-oxygen water vapour. The procedure for preparing and storing ordinary oxygen-charcoal was identical but ordinary oxygen and water vapour were used. Special experiments were carried out in which charcoal containing ordinary oxygen was treated with heavy-oxygen water vapour whose final isotope content was then determined, or charcoal containing O^{18} was treated with ordinary water, filtered off and its isotope composition determined by mass spectrometry on the CO_2 obtained by degassing at 300 to 550°C. For H_2O_2 , mass spectrometric isotope analysis was carried out on the oxygen evolved when the peroxide was decomposed with potassium permanganate: and for water, on CO_2 after exchange with the water. Results showed that there is no exchange of the oxygen of the basic oxides with water. For the main H_2O_2 decomposition experiments in a quartz tube containing 1 to 4 g of degassed charcoal was put in a furnace. One end of the tube was connected to a trap for freezing out the desorbed gases and to a vacuum installation; the other to a trap containing the required quantity of peroxide, freed from dissolved oxygen. The tube was periodically rotated. After the required time, the

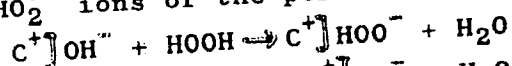
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water and undecomposed peroxide was distilled and the charcoal degassed as before. The CO₂ fraction, collected at 300 to 550°C, was analysed for O¹⁸. In some experiments the isotope composition of the oxides was determined from the water obtained during their treatment with hydrogen. Mass spectrometry revealed carbon dioxide as well as oxygen in the gaseous decomposition products. In agreement with the views of G. Brinkmann (Ref. 6: Ang. Chem., v. 61, 1949, 378) the results suggest that a double decomposition type of reaction occurs between the basic OH groups in the charcoal surface and HO₂⁻ ions of the peroxide



followed by $C^+ \text{HOO}^- + HOOH \rightarrow C^+ \text{OH}^- + H_2O + O_2$

The origin of CO₂ in the decomposition of H₂O₂ on charcoal is not clear since the simultaneous presence of H₂O and CO₂, in view of the exchange between them, alters the primary CO₂ composition. The observed change in the isotope composition of oxides on charcoal cannot be attributed to further oxidation of the coal to give oxygen compounds, differing from OH groups, whose high-

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E111/E485

Study of the mechanism ...

temperature decomposition could give a further quantity of CO₂ with the peroxide isotope composition. No free radicals on the charcoal surface were found by the electron paramagnetic resonance method and this is contrary to the chain mechanism proposed by various authors (e.g. Ref.8: V.A.Garten, E.Epinger, D.E.Weiss, Austr. J. Appl. Sci., v.7, 1956, 149). Academician (AS UkrSSR) A.I.Brodskiy helped in the work. There are 2 tables and 12 references: 2 Soviet-bloc and 10 non-Soviet-bloc. The four most recent references to English language publications read as follows: Ref.4: A.King, J. Chem. Soc., 1936, 1688; Ref.5: E.C.Larsen, J.H.Walton, J. Phys. Chem., v.44, 1940, 70; Ref.10: B.R.Puri, L.A.Sharma, D.D.Singh, Ind. Eng. Chem., v.50, 1958, 1075; J. Ind. Chem. Soc., v.35, 1958, 765; Ref.12: M.Cohn, H.C.Urey, J. Amer. Chem. Soc., v.60, 1958, 679.

ASSOCIATION: Institut fizicheskoy khimii im. L.V.Pisarzhhevskogo
AN UkrSSR Kiyev (Institute of Physical Chemistry
im. L.V.Pisarzhhevskiy AS UkrSSR, Kiyev)

Card 4/4

FOMENKO, A.S.; ABRAMOVA, T.M.; GANKINA, I.L.

Decomposition of hydrogen peroxide in the presence of
potassium iodate, bromate, and chlorate. Ukr. khim. zhur.
28 no.1:14-17 '62. (MIRA 16:8)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo
AN UkrSSR.

GANKINA, K.I.

69

PHASE I BOOK EXPLOITATION

SOV/5435

Kiselev, P. N., Professor; G. A. Gusterin, and A. I. Strashinin, Eds.

Voprosy radiobiologii. t. III: Sbornik trudov, posvyashchenny 60-letiyu so dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology. v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor M[ikhail] N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad. Tsentr. n-issl. in-t med. radiologii M-va zdravookhraneniya SSSR, 1960. 422 p. 1,500 copies printed.

Tech. Ed.: P. S. Peleshuk.

PURPOSE: This collection of articles is intended for radiobiologists.

COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis, and therapy of radiation diseases. Individual articles describe investigations of the biological effects of radiation carried out by workers of the Central Scientific Research Institute for Medical Radiology of the Ministry of Public Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

Card 1/10

69

. Problems in Radiation Biology (Cont.)

SOV/5435

topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

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10

Problems in Radiation Biology (Cont.)

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Card 6/10

SELUYANOV, P.M., inzh.; DRABKIN, G.M., inzh.; GANKINA, N.Z., arkhitektor;
TISHIN, A.M., arkhitektor

Standardisation of auxiliary construction elements of multistoried
industrial buildings. Prom. stroi. 38 no.10:52-57 '60. (MIRA 13:9)
(Factories--Design and construction)
(Staircases--Standards)

GANKINA, N.Z.; DRABKIN, G.M.; KRISTOL, D.I.; LAPINAGOV, P.I.; NEFEDOV, P.K.;
SELUYANOV, M.P.

Standard sections of universal multistory industrial buildings.
Prom. stroi. 40 [i.e. 41], no. 5:37-40 My '63. (MIRA 36:5)
(Industrial buildings--Design and construction)

SHAPIRO, A.I.; GANKINA, T.B.

Significance of hematological and immunological investigations in
a clinic for nervous and mental diseases. Trudy Gos. nauch.-issl.
psikhonevr. inst. no. 20:35-40 '59. (MIRA 14:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy psikhonevrologicheskiy
institut imeni V.M. Bekhtereva, Leningrad.

(NERVOUS SYSTEM—DISEASES)

(BLOOD—EXAMINATION)

(SERUM DIAGNOSIS)

GANKINA, V.E.S., REZNICHENKO, M.S., RYBALOVSKIY, A.I., (USSR)

"Structural Changes in Gliadin Induced by Irradiation of
Wheat Grain."

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug 1961.

GAN'KOV, Aleksandr Aleksandrovich, nauchnyy sotr.; PLATONOV, Vladimir Erosovich, nauchnyy sotr.; TRUSKANOV, Mikhail Davydovich, nauchnyy sotr.; SHCHERBINO, Marat Nikolayevich, nauchnyy sotr.; GLADKOV, V.A., red.; BARANOV, I.A., tekhn. red.

[Handbook on hydroacoustical fish-locating apparatus] Spravochnik po ryboposkovym gidroakusticheskim priboram. Murmansk, Murmanskoe knizhnoe izd-vo, 1961. 141 p. (MIRA 14:12)

1. Polyarnyy nauchno-issledovatel'skiy i proyektnyy institut rybnogo khozyaystva i okeanografii im. N.M.Knipovicha (for Gan'kov, Platonov, Truskanov, Shcherbino).
(Sonar in fishing)

GANKOV. B.

Utilization of high-pressure steam in the plywood industry. p. 40.
(TEZHKA PROMISHLENNOST Vol. 4, no. 7, 1955. Sofiya)

80: Monthly List of East European Accessions, (REAL), LC, VOL. 4, No. 11,
Nov. 1955, Uncl.

GANKOV, B.

GANKOV, B. Adjustment of logs for plywood. p. 29. Vol. 4, no. 8, 1955.
TEKHNIKA. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

GANKOV, B.

GANKOV, B. Mass production of parquet flooring from hardwood. p. 42.

Vol. 5, No. 8, 1956.

TEZHKA PROMISHLENOST

TECHNOLOGY

Sofia, Bulgaria

So: East European Accession, Vol. 6, No. 2, Feb. 1957

GANKOV, B.

"Conditions for qualitative lengthwise gluing beech veneer together."

p.25 (Tekhnika, Vol. 6, no. 8, 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

GANKOV, B., inzh., nauchn sutrudnik; GALANOV, A., inzh.

Plasticized laminated wood and press pieces of wood particles as substitutes for metals. Durvomebel prom 7 no.2/3:18-22 Mr-Je '64.

1. NIPKIDMP, Pazardzhik (for Gankov). 2. Chief Engineer, "Furnir-Parket" State Industrial Enterprise, Sofia (for Galanov).

GAN'KOVA, Z.A.

Interrelation of action, image, and speech in the thinking of
preschool children [with summary in English]. Vop. psikh. 6
no. 1:69-77 Ja-F '60. (MIRA 13:6)

1. Kafedra psikhologii Leningradskogo gosudarstvennogo pedago-
gicheskogo instituta im. A.I. Gertsena.
(Thought and thinking) (Child study)

DRAPKIN, B., vrach-psikhonervrolog; GANN, I., logoped

Prevention of stammering (to be continued). Nauka i zhizn' 30
no.5:55-57 My '63. (MIRA 16:10)

DRAPKIN, B., vrach-psikhonevrolog; GANN, I., logoped

Prophylaxis of stammering. Nauka i zhizn' 30 no.6:78-80 Je '63.
(MIRA 16:7)

(Stammering)

GANN, M. B.

USSR/Engineering - Welding, Methods

Mar 52

"Automatic Welding and Rapid Erection of Spherical Storage Tanks," A.S. Fal'kovich, M.B. Gann Engineers

"Avtozen Delo" No 3, pp 19-23

Describes procedure accepted for mounting petroleum storage tanks. Lobes of tank shell were welded into large sections on specially designed stands which permitted automatic welding under flux for 60% of total length of welded seams. Method considerably decreased costs of welding-mounting operations.

212T25

S/196/63/000/002/012/026
E194/E155

AUTHORS: Shpolyanskiy, Ya.A., and Gann, V.V.

TITLE: Equipment for measuring the piezo-modulus of seignette materials in the quasi-static condition

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.2, 1963, 17; abstract 2 B 85. (In collection: Segnetoelektriki, Rostov University, Rostov-on-Don, 1961, 147-151)

TEXT: Instead of existing equipment for obtaining pulsating loads, an electromagnet with a.c. supply was used and the measurements were made with an ordinary tube voltmeter. It is advantageous if the conditions of the piezo-electric under investigation are near to those of short circuit. Hence it is necessary to use an instrument of low input impedance or to diminish this latter artificially. In instrument type ЛВ-9-2 (LV-9-2) the input impedance is 600 kilohms so that it is quite permissible to take the equivalent resistance R_{eq} equal to the voltmeter resistance R_v . The points obtained lie very well on Card 1/2

Equipment for measuring the ...

S/196/63/000/002/012/026
E194/E155

the calculated calibration curve, which confirms the possibility of the more convenient quasi-static method of determining the static value of the piezo-modulus. The accuracy of measurement then remains within the same limits as for equipment using the static method, i.e. 6%.

3 figures. 3 references.

[Abstractor's note: Complete translation.]

Card 2/2

ACCESSION NR: AP4022699

S/0185/64/009/003/0283/0292

AUTHOR: Savchenko, M. A.; Gann, V. V.; Ryabko, P. V.

TITLE: Bound magnetoelastic waves in antiferromagnetics

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 9, no. 3, 1964, 283-292

TOPIC TAGS: magnetoelastic wave, bound magnetoelastic wave, antiferromagnetic substance, magnetostriction, spin wave propagation, sound wave propagation, spin-wave-sound-wave interaction, ponderomotive interaction, magneto-acoustic wave

ABSTRACT: The authors determined the absorption coefficients of sound and the changes in its velocity due to magnetostriction and ponderomotor interaction in antiferromagnetics of two types: type A, when the magnetic moments are oriented, in the absence of an external magnetic field, along a selected axis, and type B, when the magnetic moments lie in a plane perpendicular to the selected axis.

With sufficiently strong external magnetic fields, when the magnetic moments of the sublattices are "overthrown", the resonance coefficients of absorption and the resonance increments to the velocity of sound depend substantially on the external magnetic field.

Card 1/2

ACCESSION NR: AP4022699

Anomalies in the velocities of sound and the absorption coefficients are particularly great in resonance when the wave vector and the sound wave frequency coincide with the wave vector and frequency of the magnetic (spin) wave.

"The authors express deep gratitude to O. I. Akhizer and V. G. Bar'yakhtar for guidance in the performance of this work and for valuable discussion." Orig. art. has: 40 numbered equations.

ASSOCIATION: Fizyko-tekhichnyy instytut AN Ukr. SSR, Kiev (Physico-Technical Institute AN UkrSSR)

SUBMITTED: 02Sep63

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: FH, GE

NO REF SOV: 006

OTHER: 006

Card 2/2

SAVCHENKO, M.A.; GANN, V.V. [Hann, V.V.]; RYABKO, P.V.

Bound magnetoelastic waves in antiferromagnetic substances.

Ukr. fiz. zhur. 9 no.3:283-292 Mr '64.

(MIRA 17:9)

1. Fiziko-tekhnicheskiy institut AN UkrSSR, Khar'kov.

L 34547-65 EWT(1)/EPA(s)-2 Pt-10 IJT(c) GG

ACCESSION NR: AP5000359

S/0056/64/041/005/1989/1994

AUTHOR: Bar'yakhtar, V. G.; Savchenko, M. A.; Gann, V. V.;
Ryabko, P. V.

TITLE: Coupled magnetoelastic waves in antiferromagnets with
magnetic structure of the MnCO_3 type

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki,
v. 47, no. 5, 1964, 1989-1994

TOPIC TAGS: Antiferromagnetism, magnetostriction, polarization,
acoustic wave interaction, spin wave coupling, ferroacoustic
resonance

ABSTRACT: The substances investigated have weak ferro-
magnetism and a rhombohedral lattice with two magnetic ions
per unit cell. The Hamiltonian is written down in the form
of a sum of the magnetic, elastic, magnetostriction, and in-

Card 1/2

L 34547-65

ACCESSION NR: AP5000359

2

teraction energies, and it is shown that a transverse wave with polarization vector along the y axis does not interact with the two other acoustic waves, and that only this transverse wave interacts with the low frequency spin waves. The coupling between the sound and spin waves is particularly large at resonance when the spin wave frequency coincides with the frequency of the sound wave. The experimental feasibility of determining exchange integrals from ferroacoustic resonance in such substances is demonstrated. "In conclusion the authors thank O. V. Kovalev for valuable discussions." Orig. art. has: 2 figures and 31 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk UkrSSR
(Physicotechnical Institute, Academy of Sciences UkrSSR)

SUBMITTED: 03 Jun 64

ENCL: 00

SUB CODE: EM, NP

NR REF SOV: 007

OTHER: 001

Card 2/2

L 00677-66 EPF(c)/EWP(z)/EWT(1)/EWT(m)/EWP(b)/EMA(d)/EWP(t) IJP(c) GG/WW/JD

ACCESSION NR: AP5012569

UR/0181/65/007/005/1523/1528

AUTHOR: Savchenko, M. A.^{44, 45}; Gann, V. V.^{44, 45}

TITLE: Coupled magnetoelastic waves in helicoidal magnetic structures

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1523-1528

TOPIC TAGS: ferromagnetic resonance, spin resonance, acoustic resonance, magnetic structure

ABSTRACT: The authors consider coupled magnetoelastic waves in magnetic substances with helical distribution of the spins of the atoms in a constant external magnetic field, and discuss the possibility of experimentally determining the exchange integrals from ferroacoustic resonance! It is shown that the ferroacoustic and ferromagnetic resonance lines form doublets in helicoidal structures placed in a magnetic field parallel to the preferred axis. The distance between the doublet components increases in proportion to the magnetic field intensity. The ferromagnetic resonance frequencies for a magnetic field directed perpendicular to the preferred axis are investigated. It is pointed out in the conclusion that experiments of ferroacoustic resonance in helicoidal structures are best carried out in substances with small anisotropy, for example in chromium at temperatures above 120K, when ferroacoustic resonance frequencies should be of the order of 10^9 cps, although frequen-

Card 1/2

L 00677-66

ACCESSION NR: AP5012569

cies on the order of 10^{11} cps are necessary for reliable determination of the component of the exchange integrals. "The authors thank V. G. Bar'yakhtar⁴⁵ for interest in the work and for valuable remarks." Orig. art. has: 21 formulas and 2 figures.

ASSOCIATION: Fizicheskoye tekhnicheskoye institut AN UkrSSR, Khar'kov (Physicotechnical Institute, AN UkrSSR).

SUBMITTED: 26Oct64

ENCL: 00

SUB CODE: EM

NR REF SOV: 003

OTHER: 002

Card 2/2

L 47053-65 EWT(m) IJP(c)

ACCESSION-NR: AP5007686

S/0185/65/010/003/0263/0274

AUTHOR: Savchenko, M. A.; Hann, V. V. (Gann, V. V.); Ryabko, P. V.

TITLE: Ferroacoustic resonance in magnets

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 3, 1965, 263-274

TOPIC TAGS: ferroacoustic resonance, ferromagnetism, antiferromagnetism, spin wave excitation, acoustic wave excitation, magnetic moment

ABSTRACT: The article considers the excitation of magnetic (spin) waves by an external sound field on the boundary. The initial boundary conditions, which must be satisfied by the exchange forces, the surface-anisotropy field, and the surface magnetostriction are determined. It is shown that a gradual collapse of the magnetic moments of the sublattices is excited near the boundary of antiferromagnets whose magnetic moments are at an angle with a strong external magnetic field. In this case the depth of the distortion of the magnetic structure equals several atomic-lattice constants. The resonant spin wave amplitudes are obtained in the approximation of weak surface anisotropy. The absorption coefficients of the

Card 1/2

L 47053-65

ACCESSION NR: AP5007686

coupled oscillations occurring at resonance are calculated. Separate calculations are made of resonance of antiferromagnets with mirror sublattice symmetry and for antiferromagnets in a transverse magnetic field. "The authors thank V. G. Bar'yakhtar and S. V. Peletminskiy (Peletminskiy) for valuable discussions." Orig. art. has: 50 formulas.

ASSOCIATION: Fiziko-tekhnichnyy instytut AN URSR, Kharkiv [Fiziko-tehnicheskii institut AN UkrSSR] (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 26May64

ENCL: 00

SUB CODE: IM

NR REF SOV: 004

OTHER: 003

am
Card 2/2

ACC NR: AP6036951

(H, V)

SOURCE CODE: UR/0181/66/008/011/3167/3172

AUTHOR: Gann, V. V.

ORG: Physicotechnical Institute AN UkrSSR, Kharkov (Fiziko-tekhnicheskiy institut)

TITLE: Nonuniform resonance in a ferromagnetic plate

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3167-3172

TOPIC TAGS: ferromagnetic resonance, dipole interaction, magnetization

ABSTRACT: The paper considers nonuniform oscillations of magnetization in a ferromagnetic plate, taking into account both the dipole-dipole and the nonuniform exchange interaction in the case where both of these types of interaction are substantial, namely, in a thin film, when the wave vector is not orthogonal to the film surface. Both natural and induced oscillations of the ferromagnetic plate are discussed. The limits of applicability of the approximation due to C. Kittel (Phys. Rev., 110, 1295, 1958) and L. Walker (Phys. Rev., 105, 390, 1957) are determined. A simultaneous consideration of dipole interaction and spatial dispersion becomes necessary when $\omega_{\text{lim}} < \omega_1$ (ω_{lim} being some limiting frequency below which only resonance on Walker modes is observed, and ω_1 being a limiting frequency of Walker modes), and k_1 is sufficiently large (k_1 being a wave vector with components k_x and k_y). Under these conditions, new resonance frequencies appear which can be observed in thin films prepared of material with a small magnetic moment relaxation constant. In conclusion,

Card 1/2

ACC NR: AF6036951

the author expresses his appreciation to V. G. Bar'yakhtar for suggesting the topic and useful discussions. Orig. art. has: 3 figures and 12 formulas. ...

SUB CODE: 20/ SUBM DATE: 03Feb66/ OTH REF: 004

Card 2/2

LIVSHITS, D.S.; GANNEL', V.Ya.; NAYFEL'D, M.R.; ZEYLIDZON, Ye.D.

Power supply of control networks in systems with grounded neutral line. Prom. energ. 20 no.9:12-18 S '65. (MIRA 18:9)

1. Gosudarstvennyy institut po proyektirovaniyu elektrooborudovaniya dlya tyazheloy promyshlennosti (for Livshits). 2. Proyektno-konstruktor-skiy institut Pishchepromavtomatika (for Gannel'). 3. Moskovskoye eksperimental'noye otdeleniye Gosudarstvennogo proyektного instituta tyazheloy elektricheskoy promyshlennosti (for Nayfel'd). 4. Gosudarstvennyy proyektnyy institut po energetike i elektrifikatsii SSSR (for Zeylidzon).

VETCHINKIN, G. A. and GANNELY, V. Ya.

"On the problem of protection of asynchronous motors with short circuited rotors,"
Industrial Power, 7th edition, 1952. Prom. energ., 9, No 7, 1952.

GANNEL', V.Ya., inzh.; VETCHINKIN, G.A., inzh.

Increase in the reliability of a.c. relay protection.
Energetik 8 no.9:17-18 S '60. (MIRA 14:9)
(Electric relays) (Electric protection)

GANNEL', Viktor Yakovlevich; SON'KIN, M.A., kand. tekhn. nauk, red.;
DOBUZHINSKAYA, L.V., tekhn. red.

[Electric drive of wire-drawing benches and rope-spinning machines]
Elektroprivod volochil'nykh stanov i kanatnykh mashin. Moskva,
Metallurgizdat, 1962. 175 p. (MIRA 15:7)
(Wire drawing) (Wire rope) (Electric driving)

GANNEL' , V.Ya., inzh.

Power supply of control circuits in systems with grounded neutral.
Prom. energ. 18 no.6:40-41 Je '63. (MIRA 16:7)

(Electric motors---Safety regulations)
(Electric driving)

GANNEMAN, V. V.

otics; Resins; Paints;
Surface Coatings

mat
6

Stabilisation of cellulose triacetate films against thermo-oxidative
destruction. A. A. Kreiman, V. A. Bartashev, L. I. Shugalyova,
V. V. Ganneman, G. P. Marova, and B. L. Ovchinnikova. *J. Appl.*
Chem. USSR, 1952, 25, 828-833. The thermal oxidation of
cellulose acetate (I) results in the formation of CO₂ and CO,
decarboxylation of the (I) and lowering of its mol. wt. through
chain breakage. The accumulation of CO₂ and CO in the gas
phase is proportional to the time of oxidation and is closely
connected with the mechanism of oxidative degradation. Phenyl-
naphthylamine affords good protection against O₂ at 140°.
R. C. MURRAY

MA
7-13-54

SMOLKIN, G., kandidat tekhnicheskikh nauk; ASTAKHOV, A., inzhener;
DANILICHEV, V., inzhener; GANNENKO, G., laborant.

Increasing engine economy by switching out separate cylinders.
Avt. transp. 34 no.8:15-16 Ag '56. (MLRA 9:10)

1. Chelyabinskiy politekhnicheskii institut.
(Automobiles--Engines)

TSAREV, B.A.; GANNEMAN, V.V.; MARTYSH, G.G.; YAKOVLEV, T.P.

Use of polyvinyl alcohol in photographic emulsions. Trudy LII
no. 5:159-164 '59. (MIRA 13:12)

1. Kafedra tekhnologii proizvodstva kinofotomaterialov.
Leningradskogo instituta kinoinzhenerov.
(Photographic emulsions) (Vinyl alcohol)

GANNIBAL, G.

Information service instead of an inquiry office. Grazhd. av. 16
no. 3:30 Mr '59. (MIRA 12:4)

1. Dispatcher sluzhby dvizheniya na aeroporte gor. Irkutsk.
(Airports)

GANNICH, L.O. [Hannyeh, L.O.]

Harvest with each KU-2A combine five to six hectares in a day.
Mekh. sil'.hosp. 12 no.8:3 Ag '61. (MIRA 14:7)

1. Glavnyy inzh. Nikopol'skogo rayonnogo otdeleniya
"Sel'khoztekhnika", Dnepropetrovskoy oblasti.
(Corn picker (Machine))

GANNICH, L.O. [Hannych, L.O.]

We are harvesting corn with machines only. Mekh. sil'. hosp. 13
no.7:3-5 J1 '62. (MIRA 17:3)

1. Predsedatel' Nikopol'skogo rayonnogo ispolnitel'nogo komiteta,
Dnepropetrovskoy oblasti.

ARKAD'YEV, B.A., inzh.; GANNITSA, V.M., inzh.; POLTORATSKAYA, N.B., inzh.

Calculation of the heating of the flange connections of
turbines. Teploenergetika 11 no.4:63-66 Ap '64.

(MIRA 17:6)

1. Khar'kovskiy turbinnyy zavod imeni Kirova.

ARKAD'YEV, B.A.; GANNIISA, V.M.; POLORATSKAYA, N.B.

Problem of the heating of a flanged joint. Inzh.-fiz. zhuz. 8 no.6.
735-741 Je '65. (MIRA 13:7)

1. Turbinnyy zavod imeni Kirova, Khar'kov.

CANNOTA, A.A.

Chamotte limestone building material. S. V. Cannota
and A. A. Cannota. U.S. Pat. 1,973,333. Sept. 23, 1937.
The greens are fired at 900-1000°, moistened, and ground. 10-20% of the fired product can be replaced by green clay
and part of it can be added as a filler. S. V. Cannota

CANNOTA, B.V.

Chamotte-limestone bonding material. H. V. Cannota
and A. A. Gagnon. U.S.S.R. 1973, Sept. 18, 1973.
The green mix is fired at 950-1000°, moistened, and ground. 10-30% of the fired product can be replaced by green clay and part of it can be added as a filler. M. Hoshii

GANNOKHA, Yu.N., kand.med.nauk

So-called acute psychoses. Vop. klin. nevr. i psikh. no.2:318-
323 '58. (MIRA 14:10)

(PSYCHOSES)

ROYZEN, L.I.; GANNUS, V.K.

Automatic equipment for supplying liquid nitrogen to vessels.
Prib. i tekhn. eksp. 6 no.2:191-192 Mr-Ap '61. (MIRA 14:9)

1. Vsesoyuznyy elektrotekhnicheskiy institut.
(Gases--Liquifaction) (Nitrogen)

GANNUSHKIN, M. S.; Docent M. Ye. AVVAKIMOV; Instructor T. M. ZAELOTSKIY

"Lugol's Therapy of Strangles in Horses,"
Military Veterinary Academy

"Bolezni Loshadey (Equine Diseases), Sbornik Rabot (Collection of Work)",
Ogiz-Sel'khozgiz (? State Press for Agricultural Literature), 1947

Above article appears in Section V of the book - Tests and Practice, on p. 258
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USSR/Medicine (Veterinary) - Infectious Diseases Mar 51

"Factors of the External Medium in the Epidemiology of Infectious Diseases," Prof M. S. Gannushkin

"Veterinariya" Vol XXVIII, No 3, pp 7-11

Discusses changes of virulence which bacteria undergo outside of the organism, in passing through the organism of weak animals which are infected first, under artificial conditions created in the laboratory, etc. Emphasizes that bacteria are external factor with respect to the organism and states

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that G. Bosh'yan underestimates role of the organism in infection and overestimates that of bacteria and their various stages. Rozhkov makes the opposite error in the case of equine infectious anemia and lays undue stress on the state of the animal's organism. In the case of this particular disease, Bosh'yan is influenced by Rozhkov's views.

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Country : USSR R
 Category : Diseases of Farm Animals. Diseases Caused by Bacteria and Fungi
 Abs. Jour. : Ref Zhur-Biol, No 23, 1958, No 105820
 Author : Gannushkin, M. S.; Bessarabov, B. F.; Butkin, *
 Institut. : ~~---~~ *Moskovskaya Veterinarnaya Akademiya*
 Title : Biomycin in Paratyphoid of Piglets, Brucellosis of Cattle and Infectious Pleuropneumonia of Goats
 Orig Pub. : Veterinariya, 1958, No 3, 53-56

Abstract : The therapeutic effectiveness of biomycin (B) was tried in two experiments conducted on 24 and 115 young pigs affected with paratyphoid. All animals treated with B recovered. The use of synthomycin [chloramphenicol], as well as the action of antiparatyphoid serum and that of sulfam preparations, proved less effective than B. Better results were achieved when B was applied

* Ye. I.; Zanaa, M.

Card:

...brucellar serum. It was demonstrated that B in a dose of 0.3 g. constitutes a good preparation for the treatment of infectious pleuropneumonia of goats.-- A. P. Isupov

GANNUSHKIN, Matvey Solomonovich, prof.; BESKHLEBNOV, Yu.A., red.;
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GANNUSHKIN, Petr Borisovich; KERBIKOV, O.V., prof., red.;
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(CEREBRAL CORTEX, blood supply,
eff. of intracerebral obliteration of cortical veins
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